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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/455,102	12/06/99	PERSSON	M AN05939P1-US

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EXAMINER

LOVERING, R

ART UNIT	PAPER NUMBER
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1712

DATE MAILED:

09/22/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/455,102

Applicant(s)

PERSSON ET AL.

Examiner

LOVERING

Group Art Unit

1712

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on FEB. 7 & 28, 2000 AND JUNE 12, 2000
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-81 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☒ Claim(s) 1, 3-8, 10-32, 36-71 AND 76-81 is/are allowed.
- ☒ Claim(s) 2, 9, 33-35 AND 72 is/are rejected.
- ☒ Claim(s) 2, 9 AND 73-75 is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____
 - ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 4
- ☐ Interview Summary, PTO-413
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

Office Action Summary

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 33-35 and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arika et al 4,554,211.

Arika et al. (Esp. Abstract, and Ex. 1) disclose making a spherical micro-porous silica gel from an emulsion containing a silica having a primary particle size below 6 μm and a molar ratio of $\text{SiO}_2/\text{Na}_2\text{O}$ of 5, to which acetic acid anhydride is subsequently added to cause gelation, and the gel resulting therefrom is further acidified and dried, resulting in a specific surface area of 1379 m^2/g . In the very least during the drying step the product of Arika et al. Would have a silica content of at least 17.5% by wt. While Arika et al. May not use the expression "polysilicate microgel", their product would fit the quoted expression because of the growth in size of the silica particles during their process. A reference need not disclose a specific limitation in haec verba. See in re Bode et al. 193 USPQ 12,13. As to claim 72 herein, the aqueous gel of Arika et al. Would be anionic because of its production from an acidic medium.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. Claims 2 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 2 and 9 recite Markush groups which are not considered proper for the reason that they are indefinite as to scope and incomplete as to their memberships in not reciting -- the group consisting of -- after "from" and in using "or" instead of -- and -- between their penultimate and last members.

5. Claims 73-75 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claims 2 and 9 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record doesn't disclose or fairly suggest the aqueous polysilicate microgel(s) or process(es) for preparing them or the drainage/dewatering aids covered by claims 1-32, 36-71 and 73-81 herein.)Other than Arika et al. Above, Rushmere 4,954,220 is regarded as the closest prior art.) In particular, the prior art of record doesn't disclose or suggest mixing an aqueous solution of an aqueous phase of silica-based material having a PH of 11 or less, e.g. a silica sol to obtain an aqueous polysilicate microgel.

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8. In applicants amendment filed June 12, 2000, holes have been punched through the first line of claim 50, 59 and 69. Applicants are required to verify the presumption that claim 50 depends upon claim 47 and to state upon which claim, claim 69 depends.

9. The remaining references listed on the attached form PTO-1449 (2 pages) and form PTO-892 are cumulative to the reference applied herein, and/or further show the state of the art.

10. Any inquiry concerning this communication should be directed to Examiner Lovering at telephone number (703) 308-0443.

Richard D. Lovering
RICHARD D. LOVERING
PRIMARY EXAMINER
GROUP 1200 1700